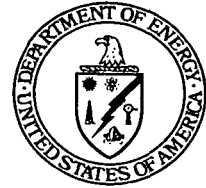


## Department of Energy

Ohio Field Office  
Fernald Area Office

P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



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SEP 16 1999

Mr. James A. Saric, Remedial Project Manager  
U.S. Environmental Protection Agency  
Region V, SRF-5J  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

DOE-1122-99

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, OH 45402-2911

Dear Mr. Saric and Mr. Schneider:

### TRANSMITTAL OF RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENT RESPONSES ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR THE AREA 3 LIME SLUDGE PONDS

- References:
- 1) Letter, T. Schneider to J. Reising, "Responses to OEPA  
Comments - Lime Sludge Ponds IRDP," dated August 25, 1999
  - 2) Letter DOE-1019-99, J. Reising to J. Saric and T. Schneider,  
"Transmittal of Responses to U.S. Environmental Protection Agency  
and Ohio Environmental Protection Agency Comments on the Draft  
Integrated Remedial Design Package for the Area 3 Lime Sludge  
Ponds," dated August 10, 1999

Enclosed for your review and approval are responses to Ohio Environmental Protection Agency (OEPA) comments (Reference 1) on previously submitted responses (Reference 2) on the draft Integrated Remedial Design Package (IRDP) for the Area 3 Lime Sludge Ponds. The IRDP will be revised and finalized upon regulatory approval of these responses and actions.

SEP 16 1999

Mr. James A. Saric  
Mr. Tom Schneider

-2-

If you have any questions or concerns regarding these responses, please contact Robert Janke at (513) 648-3124.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:R.J. Janke

Enclosures

cc w/enclosures:

G. Jablonowski, USEPA-V, SRF-5J  
T. Schneider, OEPA - Dayton (three copies of enclosures)  
F. Bell, ATSDR  
M. Schupe, HSI GeoTrans  
R. Vandegrift, ODH  
F. Barker, Tetra-Tech  
(AR Coordinator, FDF/78)

cc w/o enclosures:

N. Hallein, EM-42/CLOV  
R. Abitz, FDF/52-0  
J. Blankemeyer, FDF/52-0  
D. Carr, FDF/52-2  
J. Chiou, FDF/52-0  
T. Hagen, FDF/65-2  
J. Harmon, FDF/90  
R. Heck, FDF/2  
S. Hinnefeld, FDF/31  
T. Klimek, FDF/64  
T. Patton, FDF/76  
T. Walsh, FDF/65-2  
ECDC, FDF/52-7

**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENT  
RESPONSES ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE  
FOR THE AREA 3 LIME SLUDGE PONDS  
(REVISION B)**

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**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT**

**GENERAL COMMENTS**

- 1)      Commenting Organization: OEPA      Commentor: OFFO  
Section #:      Page #:      Line #:      Code: C  
Original Comment #: 1  
Comment:      The proposed method for using the above WAC area south of the K-65 trench is still not acceptable to the Ohio EPA. Areas which contain known above-WAC contamination are not to be disturbed in any way. An alternative area will need to be identified.
- Response:      Due to the physical constraints of this area, DOE is proposing to maintain this area south of the K-65 trench as the contractor support area. To address concerns regarding the presence of above-WAC material in the area, sampling will be conducted in the area to determine the vertical limits of the above-WAC contamination. Attached to these responses to comments is the variance to an existing approved PSP for Area 7 (which the Lime Sludge Ponds are located within), showing the sample locations. The area will be excavated to remove the above-WAC material and any necessary back filling will be placed using clean material from the Borrow Area.
- Action:      DOE will conduct sampling in the area south of the K-65 trench in an effort to identify the vertical extent of above-WAC contamination (see attached variance for sample locations). Based on the sampling results, the area will be excavated followed by the establishment of the contractor's support area.

**SPECIFIC COMMENTS**

- 2)      Commenting Organization: OEPA      Commentor: OFFO  
Section #: 4.4      Page #: 4-5      Line #:      Code: C  
Original Comment #: 9  
Comment:      Ohio EPA does not feel that using IEMP monitoring of the perched groundwater zone is sufficient to assess possible impact from the WMF. Project specific monitoring is necessary to ensure immediate detection of any contamination released into the groundwater. If the IEMP is the preferred method, details will need to be provided on how the IEMP will monitor specifically for this project versus the sitewide monitoring currently performed.
- Response:      There are two wells located downgradient of the LSP which can be used to monitor the perched groundwater zone in the vicinity of the WMF during its operation. These wells will be incorporated into a project specific quarterly sampling program. The water coming to the WMF will be originating from Plants 2/3 and 6; the wells will therefore be monitored for the constituents of concern relative to those areas.

Action: The project specific monitoring of the perched groundwater in the vicinity of the LSP will be incorporated into a quarterly sampling program during the operation of the WMF.

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3) Commenting Organization: OEPA Commentor: OFFO  
Section #: Page #: Line #: Code: C  
Original Comment #: 10  
Comment: Section 8.6.5 of the IMPP states explicitly how the sludge from the LSP is to be disposed of in the cell. The IRDP should reference this agreed upon and approved method. If DOE wishes to attempt to reclassify the sludge, a detailed justification and plan will need to be submitted to the agencies for review.

Response: The completion of the IRDP for the LSPs is pending the collection of samples from the LSPs and testing of the material by GeoSyntec to evaluate alternative placement options for the sludge material based on several excavation options (stabilization of the lime sludge material). Once this testing and evaluation has taken place, and a recommendation has been made for placement of the lime sludge in the OSDF, one of the following two paths forward will be selected and implemented.

- Option One - proceed to excavate and place the lime sludge as it is currently designated by the IMPP. The IRDP will be revised (Implementation Plan, specifications and construction drawings) to reflect the placement of the sludge per the currently approved method.
- Option Two - develop an alternate placement plan for the lime sludge based on the sampling analysis and testing results. This could include the approach that is presented in the current IRDP (soil blending with the sludge and subsequent placement). The placement plan will be submitted to the agencies for review and approval. Upon receipt of agency approval, the IRDP (Implementation Plan, specifications and construction drawings) will be revised to reflect the approved alternative strategy for excavation and placement.

These pending changes will not change the approach relative to the WMF, only the excavation and placement of the lime sludge material. DOE therefore requests a partial approval of the IRDP, specifically the portion regarding the WMF. Upon completion of the sampling and testing results, the proposed path forward for the excavation and placement of the lime sludge will be presented to the agencies for approval (either option 1 or 2 from above). Upon agency approval of the excavation and placement portion of the design, the entire IRDP will be finalized, incorporating the approved approach.

Action: DOE requests partial approval of the LSP IRDP with final approval pending the presentation of the approach for excavation and placement of the lime sludge material. The partial approval will address the portion of the IRDP relative to the WMF. DOE will submit the proposed excavation and placement approach upon completion of physical sampling and analysis of the material for evaluation of alternative placement options.

## VARIANCE / FIELD CHANGE NOTICE

V/FCN20500PSP1-10

Page / of 3

WBS NO.: PROJECT/DOCUMENT #20500-PSP-0001, Rev 0

PROJECT TITLE: PSP for Area 7 WAC Attainment Sampling of Area 7 Soils

Date: 9/13/99

## VARIANCE / FIELD CHANGE NOTICE (Include justification):

Modify the purpose and the scope in Section 1 of the PSP to extend the evaluation of OSDF WAC to portions of soil beyond the footprint of Silos construction activities yet within the Area 7 boundary.

This V/FCN is for physical soil sampling on the south side of the K-65 trench near the Lime Sludge Pond (LSP) not originally covered in the PSP. This relatively level area is approximately 250 feet long by 40 feet wide and is currently vegetated with grass. The area for WAC attainment review is bounded to the north by the K-65 trench and LSP, to the east by the Hooperville access road and to the south by the building 45 parking lot. For the purposes of this PSP, this area is designated as Area H.

Physical samples will be collected at the following four locations to a depth of four feet from the surface. Two of the sample locations, A7-H1 and A7-H4, are located at previous CIS sample locations 23-013 and 46-526, respectively. These locations exhibited above-OSDF WAC concentrations for technetium-99 at the surface (23-013 was 91 pCi/g and 46-526 was 37 pCi/g). In addition, bounding sampling to 4 feet in depth [involving three cardinal compass locations: west (A), east (B), and south (C)] will be conducted around A7-H1 and A7-H4. The sample locations are depicted in the attached Figure 1-1.

<u>Location ID</u>	<u>Northing</u>	<u>Easting</u>
A7-H1	480454.2	1348068.1
A7-H1A	480454.8	1348063.1
A7-H1B	480454.9	1348073.1
A7-H1C	480449.9	1348068.1
A7-H2	480454.5	1348128.2
A7-H3	480451.5	1348232.7
A7-H4	480450.1	1348327.1
A7-H4A	480450.7	1348322.1
A7-H4B	480450.8	1348332.1
A7-H4C	480445.8	1348327.1

These additional sample cores will be beta-gamma scanned and samples collected and identified in the accordance to Section 2.2 and 2.3 of the PSP with the following exceptions:

- Scan and containerize one-foot intervals instead of 6 inch intervals except for A7-H1 and A7H4. At these two locations, separate the first one-foot interval into six-inch intervals and identify as 1A (0-6") and 1B (6-12").
- All intervals will be containerized as samples regardless of the level of the beta-gamma scan (no biasing needed).
- All intervals will be submitted for analysis except for the bounding locations (A, B, and C). Only the first interval (0-1 foot) from the bounding locations will be submitted and the others will be archived. This will result in three one-foot intervals at each of the four locations (12 samples), two six-inch intervals at A7-H1 and A7-H4 (4 samples), and one one-foot interval at the bounding locations (6 samples) submitted for analysis.

The samples submitted to the FEMP laboratory will follow the same analytical and sampling requirements as identified in Table 2-1 of the PSP for TAL A (total uranium and technetium-99 analysis at ASL B/E\*). Field and data validation requirements are the same as the PSP.

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## VARIANCE / FIELD CHANGE NOTICE

V/FCN20500PSP1-10

Page 2 of 3

WBS NO.: PROJECT/DOCUMENT #20500-PSP-0001, Rev 0

PROJECT TITLE: PSP for Area 7 WAC Attainment Sampling of Area 7 Soils

Date: 9/13/99

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Justification *Modification of the scope allows this PSD to encompass Area 7, not just the Silos construction area.*  
This area is being considered as a construction laydown area for remediation of the LSP and for potential utilization in the Silos remediation. This laydown area (Area H) is within the boundaries of Area 7. Confirmation of the presence of these above-WAC constituents is needed to determine the potential use as a laydown area and also to supply data for disposition determinations.

REQUESTED BY: Rich Abitz/Mike RolfesDATE: 9/13/99

X IF REQD	VARIANCE/FAN APPROVAL	DATE	X IF REQD	VARIANCE/FAN APPROVAL	DATE
X	QUALITY ASSURANCE <i>Frank Thompson</i>	9-14-99	X	PROJECT MANAGER <i>Frank Thompson</i>	9/13/99
	DATA QUALITY MANAGEMENT			Real-time Lead	9/13/99
X	<i>Andrew Thompson</i>	09/13/99	X	Characterization Contact <i>Frank Thompson</i>	9/13/99
X	<i>Mike Rolfes</i>	9/13/99	X	WAC <i>Frank Thompson</i>	9/13/99
VARIANCE/FCN APPROVED [x]YES [ ]NO			REVISION REQUIRED: [ ]YES [x]NO		

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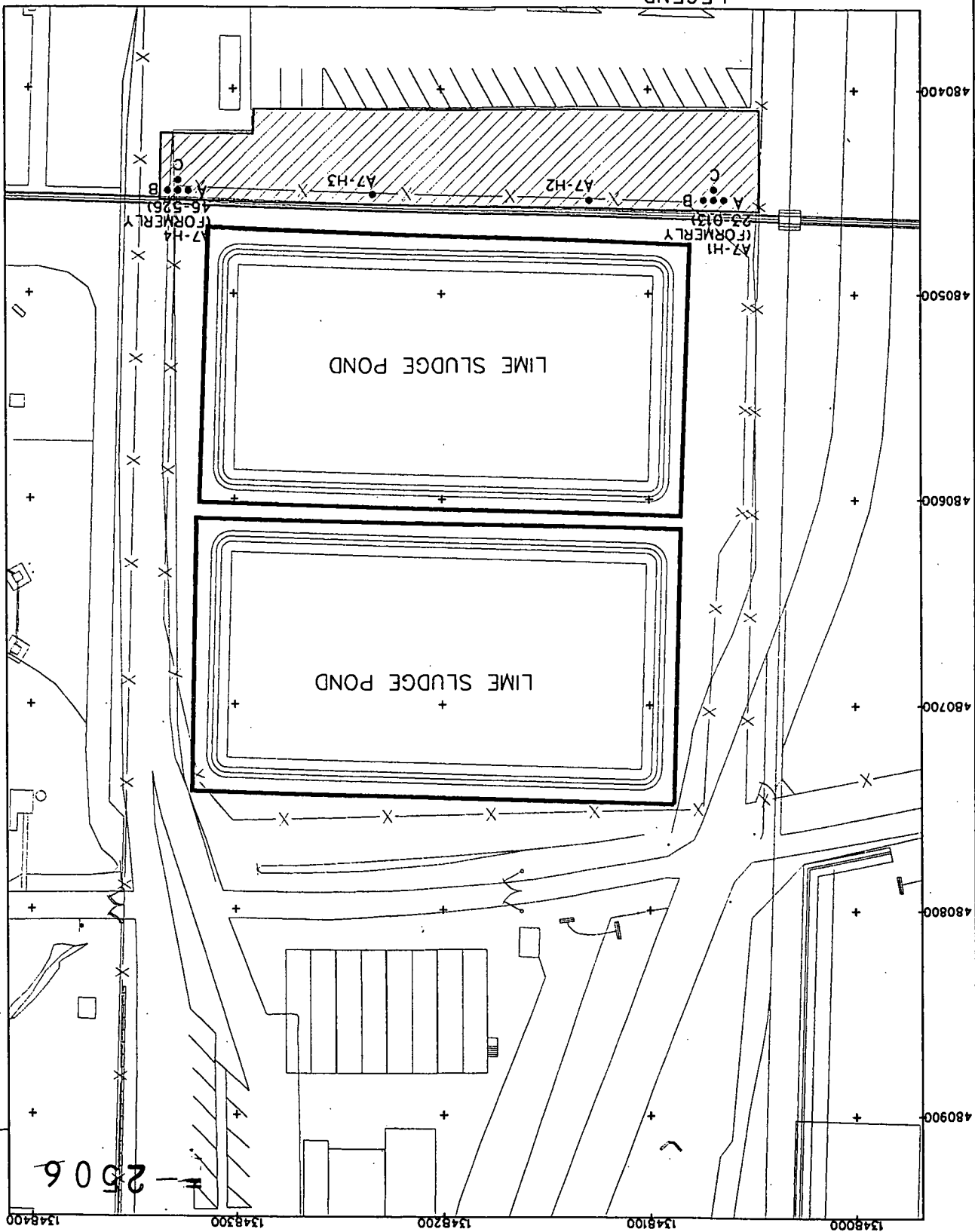


FIGURE 1-1. CONSTRUCTION LAYDOWN SAMPLING LOCATIONS

13-SEP-1993

STATE PLANNED COORDINATE SYSTEM 1983

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